Jake Gunther
Assistant Professor

Education

Ph.D.	Electrical Engineering	Brigham Young University	1998
M.S.	Electrical Engineering	Brigham Young University	1994
B.S.	Electrical Engineering	Brigham Young University	1994

USU Employment History
Assistant Professor since July 2000

Other Related Experience

Research Engineer	Merasoft, Inc. (Orem, UT), May 98-June 00
Research Assistant	Dept. of Electrical Engineering, BYU, August 95 - August 98.
Systems Engineer	Loral Federal Systems (Manassas, VA), April 94 – August 95.
Research Assistant	Dept. of Electrical Engineering, BYU, March 92 – April 94.
Computer Programmer	Self-employed, April 91 – April 94.

Consulting/Patents
SP Communications, (Logan, Utah), March 2004-present. Develop speaker phone prototype system.
Jacob H. Gunther, *Echo Cancellation Filter,* Filed: July 2003.
Ardec Corporation, (Houston, Texas), December 2000-December 2001. Design optical character recognition system for age verification from scanned drivers license images.
Jacob H. Gunther, Sidney B. Henderson, C. Robert Daniels System And Method For Text To Human Speech Synthesis October 1999.
Jonathan H. Metcalf, Robert J. O'Leary, Merlyn W. Barth, Jacob H. Gunther, Rabia B. Malik, Erik S. Peterson, Heath W. Rogers, Mikhail M. Sashnikov A System for Vending Products and Services Using and Identification Card and Associated Methods November 2001.
Jacob H. Gunther, Sidney B. Henderson, C. Robert Daniels, *System and Method For Text To Human Speech Synthesis,* Filed: October 1999.
Jonathan H. Metcalf, Robert J. O'Leary, Merlyn W. Barth,Jacob H. Gunther, Rabia B. Malik, Erik S. Peterson, Heath W. Rogers, Mikhail M. Sashnikov, *A System for Vending Products and Services Using and Identification Card and Associated Methods*, November 2001.

Professional Registration
None

Principle Publications of Last Five Years
Jacob Gunther and Roberto Lopez-Valcarce, *Blind Input, Initial State, and System Identification of SIMO Laguerre Systems,* IEEE Transactions on Signal Processing, (to appear December 2004).
Jacob Gunther and Todd Moon, *Contravariant Adaptation on Structured Matrix Spaces,* Signal Processing, October 2002, Vol. 82, No. 10, pp. 1389-1410.
Jacob Gunther, *Simultaneous DFT and IDFT of Real N-Point Sequences*, IEEE Signal Processing Letters, August 2002, Vol. 9, No. 8, pp. 245-246.
Jacob Gunther and A. Lee Swindlehurst, *Recursive Blind Symbol Estimation of Co-Channel Signals,* IEEE Transactions on Signal Processing, April 2000.
Jacob Gunther and A. Lee Swindlehurst, *Kernel Structure for Blind Equalization,* IEEE Transactions on Signal Processing, March 2000.
Jacob Gunther and Lee Swindlehurst, *Methods for Blind Equalization and Resolutions of Overlapping*

Echoes of Unknown Shape, IEEE Transactions on Signal Processing, April 1999.
R. Beard, J. Kenney, J. Gunther, J Lawton, W. Stirling, *Nonlinear Projection Filter Based on Galerkin Approximation*, Journal of Guidance, Control and Dynamics, March-April 1999.

Scientific and Professional Society Membership
IEEE Member

Honors and Awards
Professor of the year, College of Engineering, USU, 2003-04.
Researcher of the year, Department of Electrical & Computer Engineering, USU, 2003-04.
Teacher of the year, Department of Electrical & Computer Engineering, USU, 2003-04.
Advisor of the year, Department of Electrical & Comptuer Engineering, USU, 2002-03.

Institutional and Professional Service in the Last Five Years
Vice-chair for the Utah Chapter of the IEEE SP/COM Society, 2004-present.
Secretary for the Utah Chapter of the IEEE SP/COM Society, 2002-2003.
Organizing committee for the International Conference on Acoustics, Speech and Signal Processing held in Salt Lake City, Utah in 2001.

Professional Development Activities in the Last Five Years
Vice-chair for the Utah Chapter of the IEEE SP/COM Society, 2004-present.
Secretary for the Utah Chapter of the IEEE SP/com Society
Organizing committee for the International Conference on Acoustics, Speech, and Signal Processing held in Salt Lake City, Utah in 2001.
Session chair at the International Conference on Acoustics, Speech and Signal Processing in 2001.